(54) Title: NON-PRIMARY DETONATORS

(57) Abstract

Deflagration to detonation transition (DDT) detonators (1) are provided which are essentially free from primary explosives. Detonators (1) utilise an intimate mixture (5) of a large particle sized porous, powdered explosive such as PETN, and a smaller particle size, high-burn-rate, pressurising initiator such as a mixture of potassium picrate and potassium perchlorate. The smaller particle sized pressurising initiator is located within the interstitial spaces of the larger powdered explosive. Mixture (5) is able to reliably initiate an adjacent transition portion (4), or base charge (2) while reducing the need for heavy confinement. Mixture (5) can also be used directly in surface detonator applications. Improved performance and safety during manufacture of detonators is achieved.